

Amendments to the Claims

In the Claims

1. (Currently amended) A method of cleaning pressurized rail tank cars containing chemicals comprising:

providing a pressurized rail tank car having a quantity of a chemical contained therein;

providing an input gas;

heating the input gas;

providing a plurality of valves on the rail tank car;

injecting the input gas into the rail tank car ~~via~~ by opening a first valve to form a chemical/input gas mixture within the rail tank car;

closing the first valve when the rail tank car is sufficiently pressurized;

removing the chemical/input gas mixture from the rail tank car by opening a second valve;

synchronizing the opening and closing of the first and second valves so that the first valve is closed when the second valve is open and first valve is open when the second valve is closed;

providing a reaction tank comprising a neutralizing material;

injecting the chemical/input gas mixture into the tank comprising the neutralizing material;

reacting the chemical of the chemical/input gas mixture with the neutralizing material to dispose of the chemical; and

injecting further quantities of heated input gas into the rail tank car to form further chemical/input gas mixtures and injecting the further chemical/input gas mixtures into the reaction tank to react the chemical in the further chemical/input mixtures with the neutralizing material to dispose of the chemical, until the fume level of the chemical within the rail tank car has reached a predetermined level.

2. (Previously amended) The method of claim 1 further comprising the step of:

removing the chemical/input gas mixture from the rail tank car via a vacuum pump.

3. (Previously amended) The method of claim 2 further comprising the step of:

removing the chemical from the rail tank car via the vacuum pump prior to injecting the heated input gas into the rail tank car.

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Previously amended) The method of claim 1 further comprising the step of:

heating the input gas to a temperature of between about 100°F and about 300°F prior to injecting the input gas into the rail tank car.

8. (Currently amended) The method of claim 1 further comprising the steps of:

providing an input pipe attached to the rail tank car via a the first valve;

providing an output pipe attached to the rail tank car via a the second valve on a first end of the output pipe and a disposal means on a second end of the output pipe; and

closing the second valve and opening the first valve when injecting the input gas into the rail tank car.

9. (Previously amended) The method of claim 8 further comprising the step of:

closing the first valve and opening the second valve when removing the chemical or chemical/input gas mixture.

10. (Original) The method of claim 1 further comprising the step of:

providing a control means for controlling the injection of the input gas and removal of the chemical/input gas mixture.

11. (Previously amended) The method of claim 1 further comprising the steps of:

providing a control means for automatically controlling the injection of the input gas and removal of the chemical/input gas mixture; and

controlling the injection of the heated input gas to the container via the control means.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Previously amended) The method of claim 1 further comprising the step of:

synchronizing the injection of the heated input gas and the removal of the chemical/input gas mixture.

16. (Currently amended) The method of claim ~~14~~ 1 wherein the synchronization step is performed via a control means.

17. (Original) The method of claim 15 wherein the synchronization step is performed via a control means.

18. (Cancelled)

19. (Previously amended) The method of claim 1 wherein the neutralizing material comprises a caustic solution.

20. (Previously amended) The method of claim 1 wherein the neutralizing material is selected from the group consisting of sodium hydroxide, potassium hydroxide, sodium carbonate, calcium hydroxide, sodium sulfite, sodium thiosulfite, ferrous chloride and solid bed absorbents.

21. (Previously amended) The method of claim 1 further comprising the steps of:

pushing the chemical/input gas mixture through the reaction tank; and
reacting the chemical with the neutralizing material to form a salt.